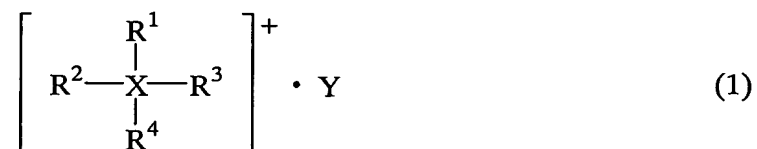


CLAIMS:

1. An electrical double-layer capacitor comprising a pair of polarizable electrodes, a separator between the polarizable electrodes and a liquid electrolyte,  
5 which electrical double-layer capacitor is characterized in that the polarizable electrodes contain as a main component an activated carbon having micropores with a pore radius distribution peak as determined by the MP method  
10 within a range of  $4.0 \times 10^{-10}$  to  $8.0 \times 10^{-10}$  m, and the liquid electrolyte includes an electrolyte salt which is an ionic liquid.

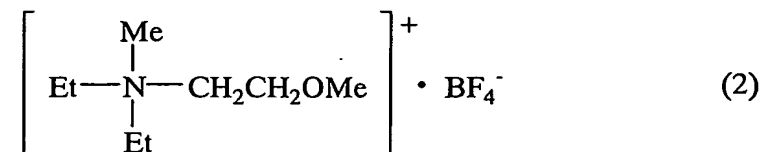
2. The electrical double-layer capacitor of claim 1 which  
15 is characterized in that the ionic liquid is a quaternary ammonium salt or a quaternary phosphonium salt.

3. The electrical double-layer capacitor of claim 2 which is characterized in that the ionic liquid has general formula  
20 (1) below



wherein  $R^1$  to  $R^4$  are each independently an alkyl group of 1 to 5 carbons or an alkoxyalkyl group of the formula  $R'-O-(CH_2)_n-$  ( $R'$  being methyl or ethyl, and the letter  $n$   
25 being an integer from 1 to 4), and any two from among  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  may together form a ring, with the proviso that at least one of  $R^1$  to  $R^4$  is the alkoxyalkyl group of the above formula;  $X$  is a nitrogen atom or a phosphorus atom; and  $Y$  is a monovalent anion.

4. The electrical double-layer capacitor of claim 3 which is characterized in that the ionic liquid has general formula (2) below



5 wherein Me stands for methyl and Et stands for ethyl.

5. The electrical double-layer capacitor of any one of claims 1 to 4 which is characterized in that the pore radius distribution peak is in a range of  $4.5 \times 10^{-10}$  to  $7.0 \times 10^{-10}$ .

10

6. The electrical double-layer capacitor of any one of claims 1 to 5 which is characterized in that the ionic liquid has a concentration in the liquid electrolyte of from 0.5 to 2.0 mol/L.

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7. The electrical double-layer capacitor of any one of claims 1 to 6 which is characterized in that an activated carbon is the activated form of a synthetic resin.

20 8. The electrical double-layer capacitor of claim 7 which is characterized in that the activated carbon is a steam-activated form of a synthetic resin.

25 9. The electrical double-layer capacitor of claim 7 or 8 which is characterized in that the synthetic resin is a phenolic resin and/or a polycarbodiimide resin.